

Name:

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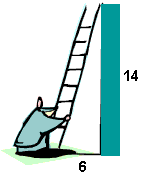
Geometry, Period

Due Date: Tue, 10 Mar 2015

**Geometry**

**Homework**

1. **Complete any classwork problems not finished in class.**
2. **Finish the right triangle problems below using any of the right triangle methods or strategies you know:** (1)Pythagorean Theorem,   
   (2) Pythagorean triples, (3) special right triangles, (4) trig, and   
   (5) inverse trig. **ALL methods must be used at least once!**



A ladder leans against a building. The foot of the ladder is 6 feet from the building. The ladder reaches a height of 14 feet on the building. Use this figure for problems 1 & 2.

1. Find the length of the ladder to the nearest foot.

*Work/Explanation:*

*Answer:\_\_\_\_\_\_\_\_\_\_\_ Method used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. Find to the nearest degree, the angle the ladder makes with the ground.

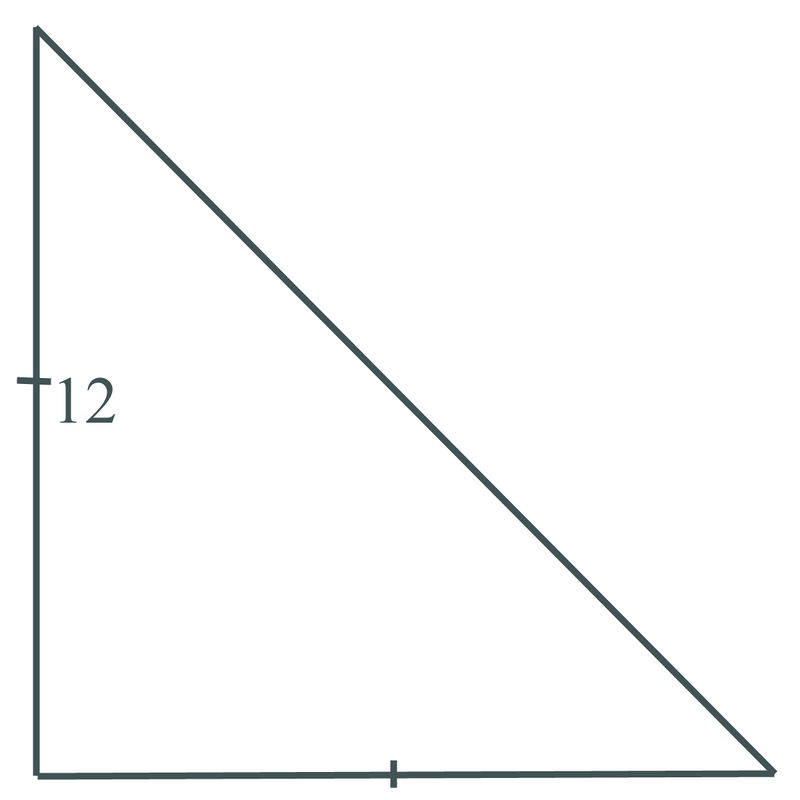
*Work/Explanation:*

*Answer:\_\_\_\_\_\_\_\_\_\_\_ Method used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. From a point on the ground 25 feet from the foot of a tree, the angle of elevation of the top of the tree is 32º. Find the height of the tree to the nearest foot.

*Work/Explanation:*

*Answer:\_\_\_\_\_\_\_\_\_\_\_ Method used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. The isosceles right triangle to the right has a leg  
   that measures 12 inches. What is the length of  
   the hypotenuse in simplified radical form?

*Work/Explanation:*

*Answer:\_\_\_\_\_\_\_\_\_\_\_ Method used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

**In right triangle ∆ABC,   
and ∠B is a right angle. Draw and   
label a figure and use this to solve   
problems 4 & 5.**

1. What is the length of side BC?

*Work/Explanation:*

*Answer:\_\_\_\_\_\_\_\_\_\_\_ Method used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. What is the measure of angle A?

*Work/Explanation:*

*Answer:\_\_\_\_\_\_\_\_\_\_\_ Method used:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. ***Combined Skills – this will require multiple steps.* Find the area of the smallest triangle.** Round all values to the nearest tenth.

